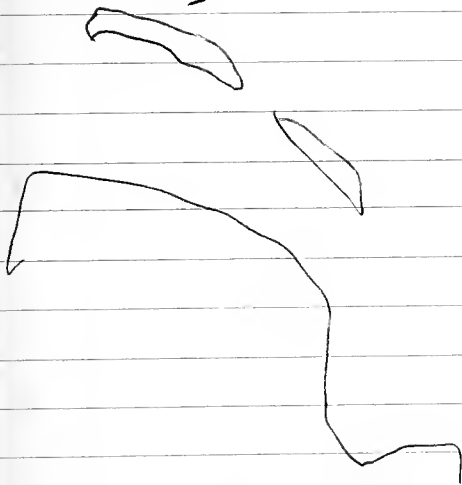


**7530-222-3521**  
**FEDERAL SUPPLY SERVICE**  
**(GPO)**



JAPAN



On road north to Moscow from Anzisk  
M-2

Melampyrum cf. nemorosum in border  
Scrophulariaceae also hemiparasit

Woods of Betula.

~~Woods~~ Norway Spruce area.

Batumi

7/17/75

adjacent republic old islamic part of  
S. Georgia people are the same as Georgian

Polone

Magnolia grandiflora

Cedrus - deodora

Prunus better fruits.

Batumi Mt.

Phytolacca americana adv.

Phytolacca perfoliata adventum

Oleodendron fruticosum absent

Quercus imbricata w. Caucasus

Paspalum dilatatum weed grass.

Lepidium

Black Locust

Compositae cf. radicans Beyer. like Gr. Oak  
Orange Fl.

Castanea sp.

*Carpinus Caucasica*  
Hart's Fongou Fern.

*Rhus* w. pinnatifid leaves  
*Sambucus* sp.

*Lurocerasus* (Prunus)

*Ulex nequens* exotica

*Butea capitata* (~~not~~ Pennant. Palm)

*Desmodium lotus*

*Robinia pseudacacia*

*Paepalium digitaria*

*Cynodon*.

Botanical Garden

Cryptomeria

Hortensia

Rhamnus

Cupressus lusitanica Mexico, Guatemala

Phyllites scolopendrium

adder's tongue Fern

Quercus rubra

Adesmia polycarpa

Tree 70'

Leaves spiral crowded  
toward end of twigs

Apical bud large.

Bark: not furrowed, tan  
marked by horizontal lenticels  
& round pits



Aleurites sp.

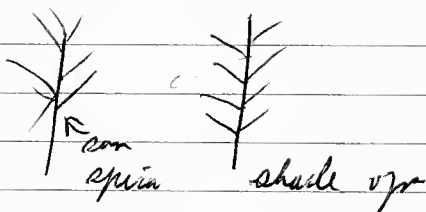
Cinnamomum glanduliferum 3' dbh  
70' India & China

Tilia cucurbitaria

Oleaceae *Oremanthus aquifolia*  
Like a large Elm

Cephalotaxus

2 forms of leaves on 1 plant.  
Lvs. spiral in sun  
detachably opp. in shade



*Prunella orientalis* *Cassia*  
*abris dortmanni* "

Pr. *Prunella orientalis* st.  
*abris dortmanni* leaf.  
*Fachycarpus stictica fortunei*  
Helyon.



New Zealand  
*Pittosporum terrefolium*  
P- *undulatum*

*Hovenia dulcis* Pf. R. homnacta.  
Thousands of Bees.

*Podocarpus tauctora* N. Z. ent.  
does not fly

*Halestemon lanceolatus* N. Z. ent.

*Cordyline* belly tree

*La Blagayana*  
tree.

~~*Furcraea*~~

*Furcraea tenax* New Zealand

*Phytolobus pubescens*

*Gallium* M. Z. ent. N. Z. ent.

*Juglans mandschurica* almond  
stays teeth medicinal

*Aleurites* fruit

*Luzula acropetala* grass  
below blade. M. not found  
in fossils.

*Beschofia trifoliata*

*Paulownia fortunei*

*Ehretia corylifolia* } <sup>Jap</sup> *Burayana*  
*magnifolia* }

*Cocculus*

*Linidern* *communis* <sup>Jap</sup>

*Corylopsis*

*Castanea mollissima*

*Xylocarpus molle*

Flaccid

pinnate serrate lvs.

(Theod or V) basal.

2° at base & then abov.

*Cotoneaster japonicus*

*Ailanthus mollissima*

freq. 2 glands on

each side on 12

last, side of leaf

*Dillenia sinensis* shrubby or vine

*Daphniphyllum* like laurel  
whorled lvs.

*Cudrania tricuspidata*  
fam. ~~to~~ Moraceae

*Abutilon guineense*

*Rhus javanica* py. - winged pet.  
w. Bark

*Scutypia subtile*

*Zalacca acuminata*

name in *Zalacca Hengani*

taken by Linton as *Zalacca*

*Thyopsis*

*Cornus controversa* var. *Colliniana*

*Podocarpus naga*

*Gardenia cf. rubra*

*Symplocos variegata*. py

*Magnolia g. denudata*

*Pterostyris hispida* or *stellata*  
huai

*Corylus willana*

*Turcodendron chinensis*

*Laurocassia officinalis*

*Arum albrispatum*  
*Osmunda regalis*  
*Pterocarya pterocarya* Michx.  
near stream

*Pumila megaseipolia* Boriss. Bat.  
Hawaii and group  
w/ *Hymenophyllum thurbergianse*

*Rhododendron ponticum*  
*Epimedium*  
~~*Cassia*~~ *strictius* Boiss.  
non possible remnant of ancient  
collectors w/ *Acropetalon* of

*Buxus* ~~to~~ *Caucasum*  
*albigena*  
*Hypophyllum rhamnoides* L.  
*Elaeagnus*

*Cauc.*  
*Berberis vulgaris* native  
Emp. I no more 21<sup>2</sup>  
w/ small 20<sup>m</sup>  
*Buxus colchica*

Ulex Colchicu

Pterocarya pterocarpus  
streamside tree 60'  
w/ fruits.

A Rhododendron ponticum bell.

Laurus baccata

once forest

Acer reticulatum  
good (E) teeth.

Acer platanoides -

Corylus maxima  
S. Europe

Juglans colchica

Mespilus germanica

Dryopteris ~~frankii~~ botteri

Athyrium

Dryopteris medieterranea

Quercus imbricata

leaf white oak leaf w/ lvs &  
almost as white

Quercus ilex.

Tilia caucasica

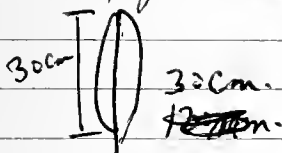
Tilia caucasica

Cardamine

*Custerea subra*

*Quercus ibérica* var. *thun*  
deciduous about 2000 m.

*Q. punctata*



19 sp of *Dalys* in Caucasus.  
2- dist in Transcaucasus  
*Q. robur*.

+ 17 sp Only in Caucasus

~~7-14 on label~~

lobed  
leaves.

{	<i>imeritina</i>	lowlands
	<i>longyis</i>	
	<i>caucasica</i>	2000 - 5000 meters
	<i>monticola</i>	
	<i>macrostentata</i>	2000 m.
	<i>pubesc.</i>	2000 m.
{	<i>brutiapoli</i>	1000 m.
	<i>ibérica</i>	adharus.

*Q. castaneifolia* - small open.

*Q. punctata* ~~etc etc~~

~~lobed~~  
~~leaves green in winter~~

*Fagus orientalis*

*Quercus pontica*

~~the~~ huge fagus  
trunks reach 12 m. circumference  
because of snow  
above 2000 feet.  
grows in clearings.

*Quercus myrsinifolia*

~~little a tree~~

Japan by tree

semi-ring

Huge tree of Caucasus

Huge Relictites Cold's fossil

*Pterocarya stenocarpa*  
Farhad USSR

*Cactinopsis*

*Passania cuspidata* China Jap

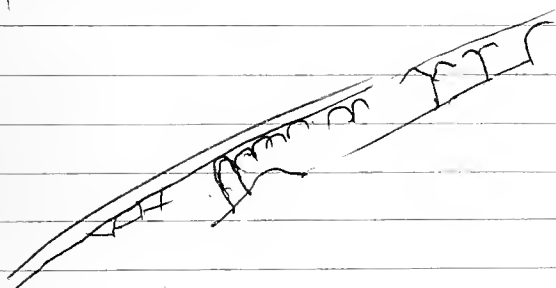
*Taxodium mucronatum*



*Quercus castanaefolia*  
Med. 54

*Eryngium* globe thistle Umbelliferae  
w/ yucca like leaves

*Quercus acuta*



*Calycanthus occidentalis*  
from the California.



July 14,

TRIP TO Mt. MITRALA

STOP #1 KIRALA

460 m

~~550~~

Cultivated plants

Begin to plant cult. plants here in 1916-

*Pinus strobus*

*almanni*

*Abies almanni*

Planted at 1000-2000 m.

*Quercus falcata*

*Lindendrum*

*Pseudopseudotsuga douglasii*

*Metaxa glypt.*

*Juglans conar*

*Pinus excelsa*

*strobus*

*Q. palustris*

dates.

A 15 <sup>Hectare</sup> ~~Hectare~~ plot. all exotics

Local forest was composed of trees yielding only sugar 300 m<sup>2</sup> wood / hectare  
The balance of empty of evergreen shrubs  
*Juglans nigra*  
2 others

A bee *nordmanni*

2200 m. To timberline  
~~Aboriginal~~ *brunneus*

On

Saw at 3 top 1

*Alnus barbata*

STOP #2 540 m.

CASTANEA FOREST

U FAGUS ORIENTALIS PK of  
alnus barbata room

Mixed forest below this  
material always covered w clouds in sun  
Mixed. Causasian Forest. not fruiting

Cost. sativa Sea Level to 800 m (1000 m)

See in Caucasus it is the dom.

tree of fow. mainly in West Cas

Chestnut is gone 500-800 m.

higher & only isolated  
Calcareous soils only oaks

Taxus baccata west Europe

Forms groves in W. Caucasus

Also Rhododendron park

East Georgia. Range of Abazgona B.

700 hectares Largest grove in W.

Height 25-30 m. - 125-130 cm diam.

Armenian grove 25 hectares

Azerbaijan 2 Hectares

S. Caucasus goes down to 500 - 1200 m

Isolated large trees

alt 40 Shrubs 20-30

(Alnus baccata  
Corylus caucasica)

tree species  
in this zone  
~~the~~

Herbets Here of

*B. ponticum*

*Taurocrassus* ff.

Herb cover poor because of shade.

*Hedera colchica*

(R). *Fagus orientalis*.

In shaded areas forest 20-30 herbs

*Penelopea gerica*

*Gentia*

Stop # 3 Stream 800m

Gentiana cyrtocalyx  
Heracleum  
Laurucerasus

Herbaceous fl.

not in mycor understory  
only along streams & margins of

Clas. Telechia

Fraxiniflorum <sup>Comp.</sup> <sup>Burr</sup> large round-le

Heracleum rasnovit

Gentiana cyrtocalyx

Ammannium caryoph

Campanula lat. lactiflora

Hypochaeris glabra

Walleriana arabicifolia

Chrys. perfoliata

Cardamine pedicularis

Saxifraga cymbalata

Pedicularis hirta

Stachys raphanifolia

Lythrum rotundifolia

Salsola glabra

Pf. of Campanula lactiflora

*Sanicula europaea*  
*Vaccinium arctostaphylos*  
*Thalictrum oxycarpum*  
*Panrunculus*  
*Fraxinella orientalis*  
*Fetula minor*  
†  
\* *Ruscus Colchica*  
*Alex colchicum*



Kalla to Stop 5.

Sorbus brissera  
Rhododendron smurnovii  
Fomentosa l.

Fraxinus alnus Rhamnus  
Rhamnus frax.

Vaccinium arctostaphylos

Ulex. Colchica

Fagus orient w Hedera colchica  
2 ft

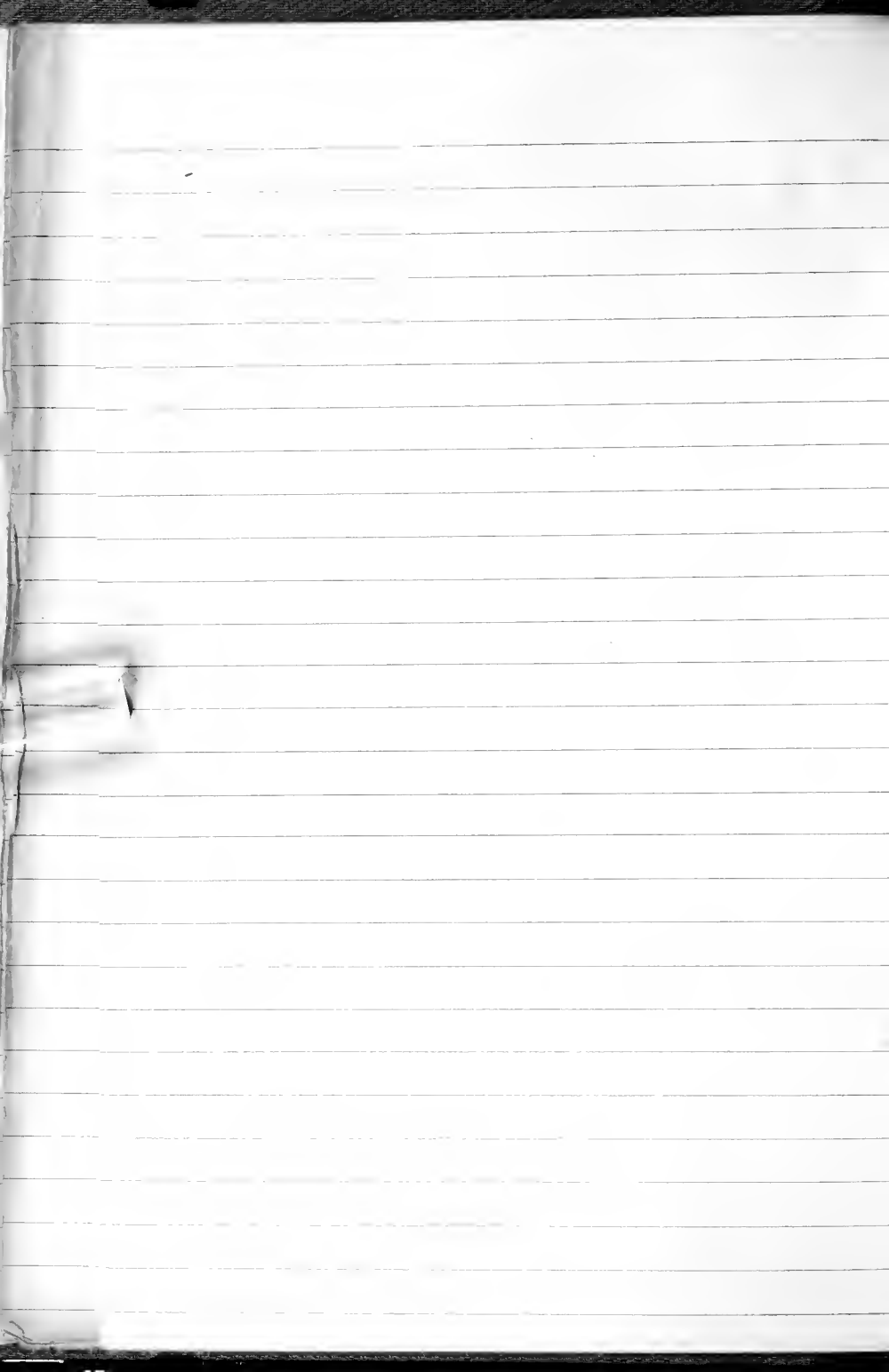
Picea orientalis 1 ft

Rhod. parviflora the Fag. orient 1 ft  
Rhod. luteum

Blechnum spicant

A Burned over area  
undershrubs Rhodo  
Vacc.

Berberis monnina in clu  
Epilobium pumophyllum  
Ulex imbricaria



NV The Lake

Beach - forest.

*Phlebotomus oxypus*

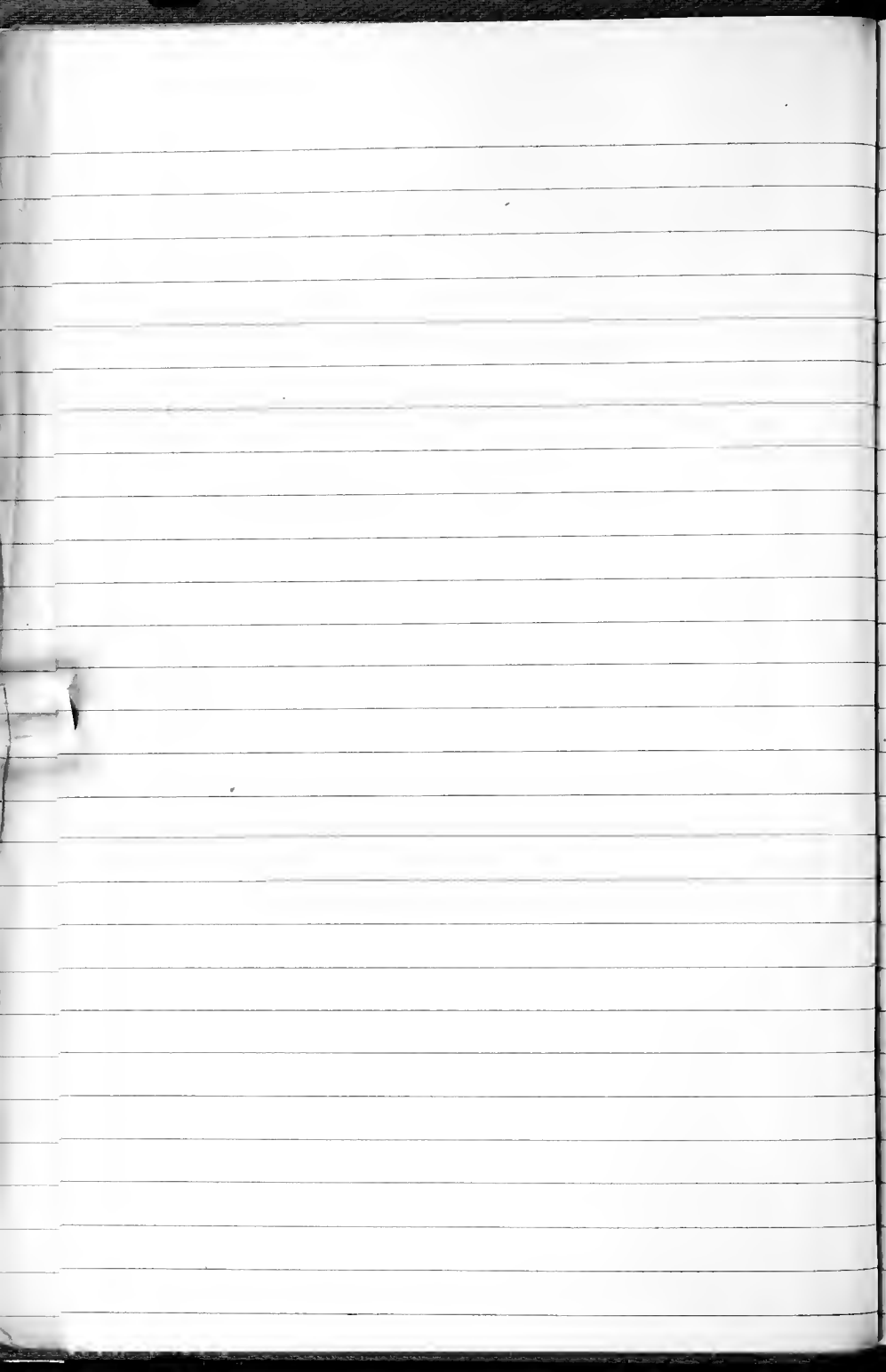
N. Pont

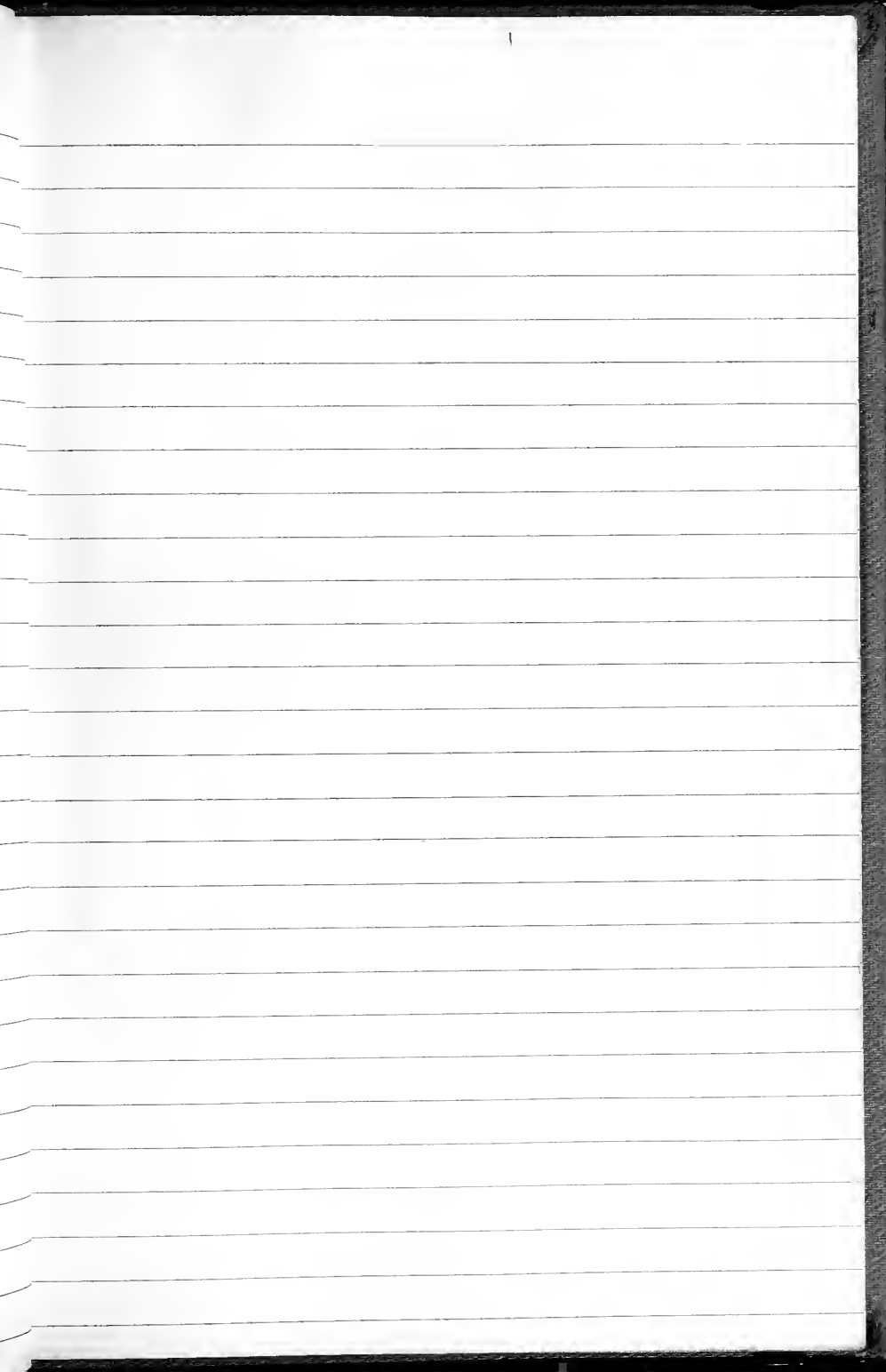
Beach

Alone.

Paris ~~on~~ incomplete

the *de olua* restricted  
a trillion analogue







სამსახურის ბილეთი

ნა ბილ. რ. 58  
თემი



საქართველოს

НАТУРАЛЬНО-ПОЛУСЛАДКОЕ

Хванчкара

საქართველოს



საქართველოს

კრედიტის ბილეთი

საქართველოს



საქართველოს

საქართველოს

საქართველოს

კრედიტის ბილეთი

საქართველოს



საქართველოს

საქართველოს

Sweet spirit rec  
117515



MA BIN 1 P. 58 K. ... ГИСТ 5590-70

ГАМРЕСТ

ТЕНДЕНД



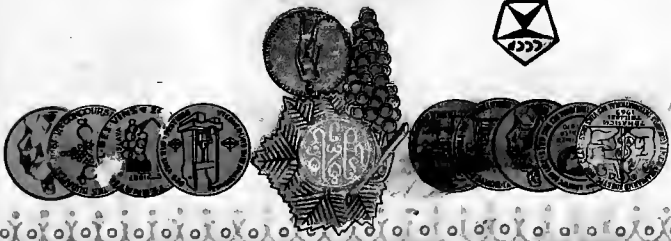
КРЕН 10.5-12.5 о.б %

БЕВОЕ

ЕМК. 0.7 л

1400

# Орхидея ГВАЖАНИ



ПРЪЗНИЧКОЕ ВИНО

John  
Burgess

ГРУЗИНСКОЕ ВИНО



მუკუზანი  
МУКУЗАНИ

КРЕП. 10,5-12,5 °св%

КРАСНОЕ

ЕМК. 0,7 л.

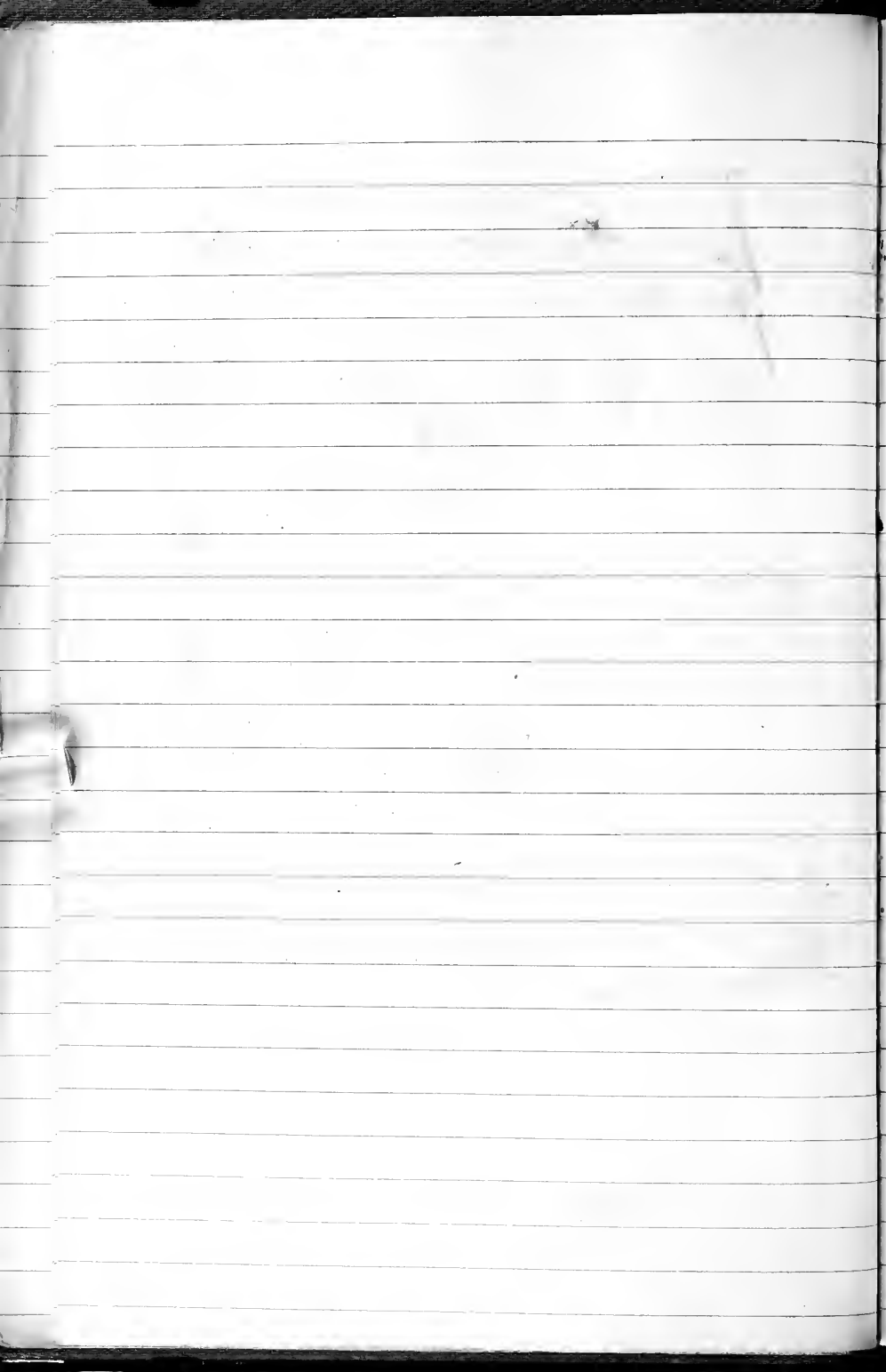


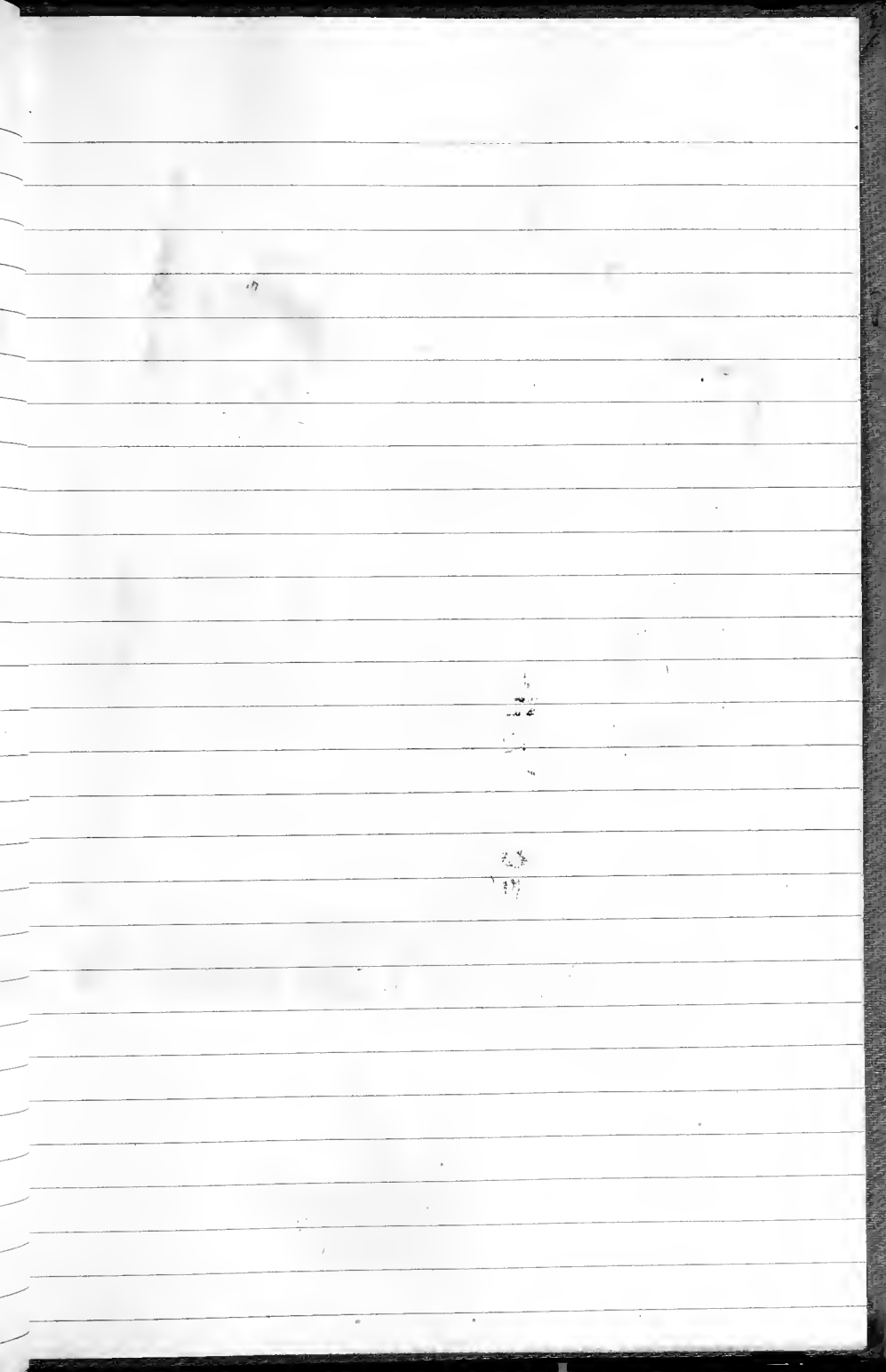
ТБИЛИСИ

САМТРЕСТ

ВИНЗАВОД №1

МПП ГРУЗИНСКОЙ ССР







Vincent





July 15 Satyria

Rainfall Honey Area"  
2200 mm

Subtropical Colchic Forests

All rest has gone to Sea level

*Gallium arcturatum*

*Carynus orientalis*

*Buxus colchica* forming high <sup>thru</sup> ~~sea~~

*Cornus mas*

*Jugos orientalis*

*Therococcus* sp

*Acer latum* sp - rare tree

*Hedera colchica*

*Smilax*

*Acer latum* - <sup>not</sup> ~~foot~~ teeth on tree

5 lobes Bark like red maple

*Myrica orientalis*

*Salix colchica*

*Hedera* both red & white fl

*Ulmus scaberrimus* A

*Quercus harknessiana* A

Succession to Decid.

Grows to 10 meters

Rhododendron leucum  
Viburnum opulus B  
Castanea sativa A  
Taxus baccata M  
Euphorbia amygdaloides  
Hamamelis virginica  
Ligustrum vulgare  
Prunella  
Yucca puberula  
~~Et al. turia agrippina ?~~

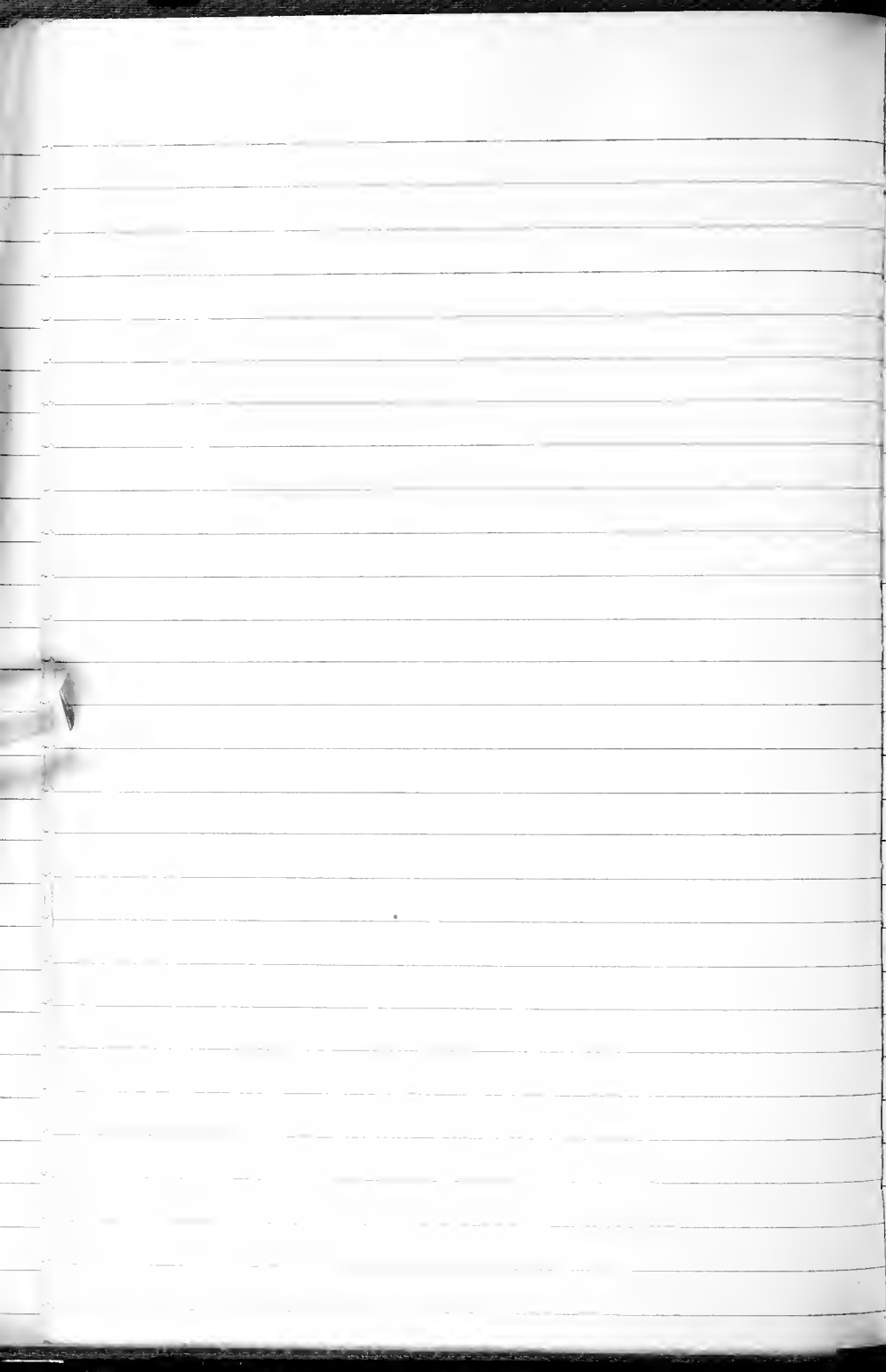
Open field Thymus serpyllum  
a legum.

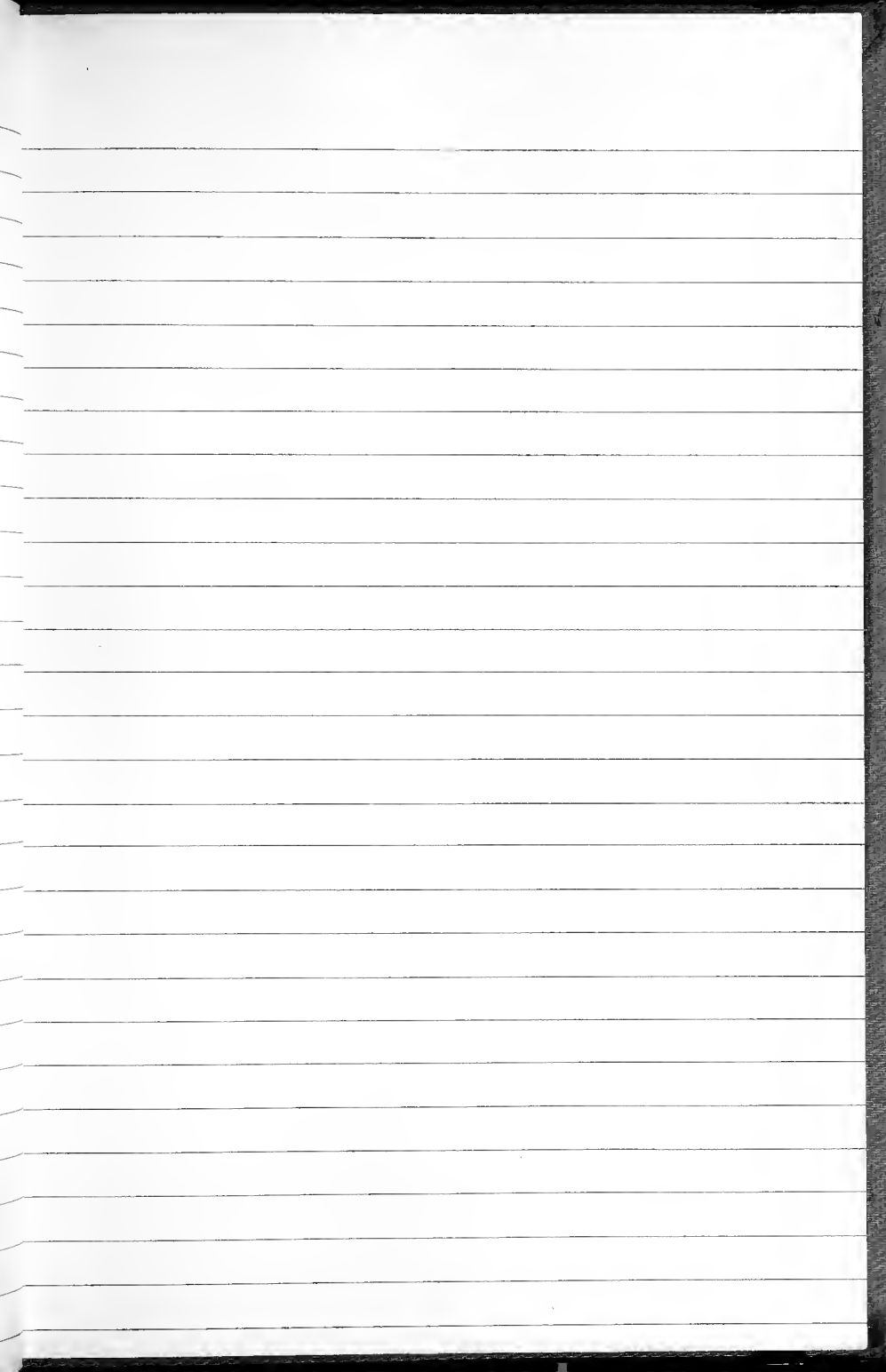
Penstemon grandiflorus  
Apocynum androsaemifolium

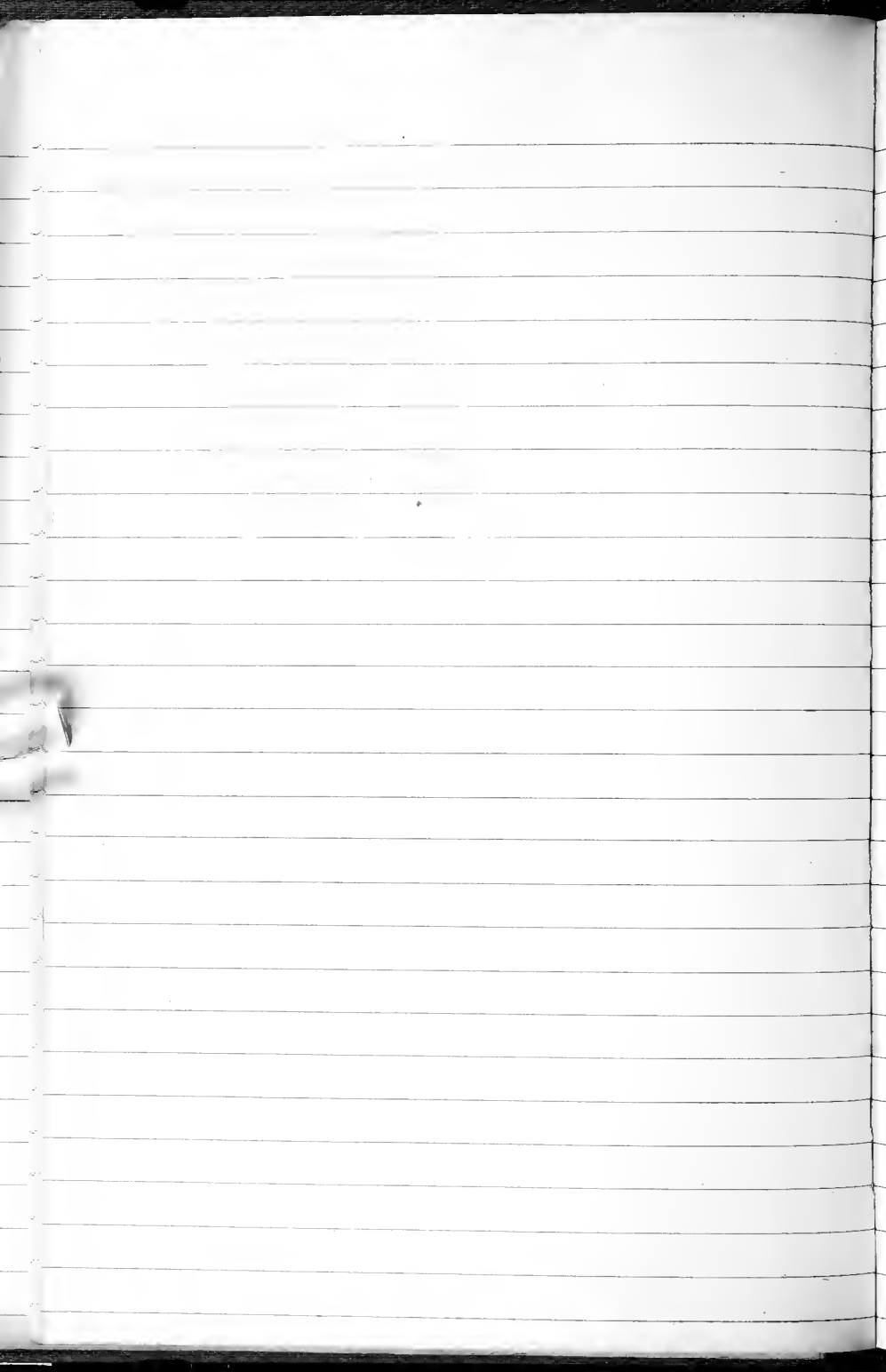
Impatiens capensis  
Pyrola asarifolia Forest alga  
Stis corniculata

Prov. of  
America America  
Low plant to cover

Group *Cyperus orient*  
A herb glab.  
orient  
& other.







July 16  
Institute of Sea and  
Subtropical Cultures

Founded in 1930

Sci Dept

non-sci

7 depts

Radiation

Dept of Irrigation  
& Amelioration

Laboratory

Biochem

Phytopath

Agro technology

Agrochemistry

Agri

Dept of Plant Protection

Experiments in agrochemistry (fert.)  
& agrotechnology

Efforts toward high yield & high quality  
raw material

Sea introduction

New variety they are trying to introduce  
will give 50-60% more yield

Biochemical Lab. - Prot. from disease &  
insects

Have found some insect controls for  
protection of subtropical fruits.

Problems of Concentration

Protection of plants  
Optimal nourishment  
Agrotech. measures.  
Study of bot + physiol of plants  
Application of isotopes

Restoration of old lands  
Protection of citrus from vit. temp.  
Research on mechanization &  
    automanagement.  
Most land very steep does not allow  
    machines

About 400 people  
3 branches Agri Comprehens. Station  
Covering all of the subtropical zone.

Rainfall 600-700 mm.  
2200<sup>-2500</sup> mm / year  
Increase in yield 25%

In the mountain zone  
500-600 mm.  
Watering inc. yields 50%

Scrapie producer 95% of Ruesson  
    Sea. 75% of subtropical  
    area & Sea



Tea Factory  
connected to dist.

Tea open from April - October  
Do several & much sorted  
young tea - Much like  
Old - Green.  
2nd rolled

Tea sorted again by length  
Then cut in cutter sep from stems

Instant tea powder used  
to dye & much charcoal  
also did some but juice to inst. tea  
just as previous

withing  
Tea leaves ~~fermented~~ <sup>wild</sup> at 38-40° C

12 tons tea / day / machine  
For Green Tea only occurs after fermentation  
FIXATION - 180° C enzymes are fixed  
here, 5 minutes Then tea is

oxidized  
Green tea fixed without pro

Rolling  
Sorting  
Fermentation

1 1/2 - 3 hrs  
enzymatic change

*Tea pictures*

# Const. of Medicinal Plants

*Oenothera biennis* *Oenothera lamarckiana* *Lactuca*  
Kidney leaf

*Vincetoxicum* ~~rosea~~? *Apocynum*  
Eau de Cologne  
Against cancer tumors

## Asclepiadaceae

~~*Diphysa*~~ *fruticosa*

*Gymnocarpus*

*Gymnocarpus* Against Heart Disease

*Kalmia latifolia* *Crossulariaceae*  
Juice used for healing topical  
ulcers

*Alcega* - *Alcega* *Alcega arborescens*  
Stomach diseases  
Topical use

Eye diseases after operation  
H000 tons

~~*Apocynum*~~  
*Bauhinia carolinensis* / *Alcega*  
Shin, eye, stomach, etc.  
10 *Alcega*

*Passiflora incarnata*  
Nerve diseases

*Eucalyptus* 3 species  
Antimicrobial  
Lung disease

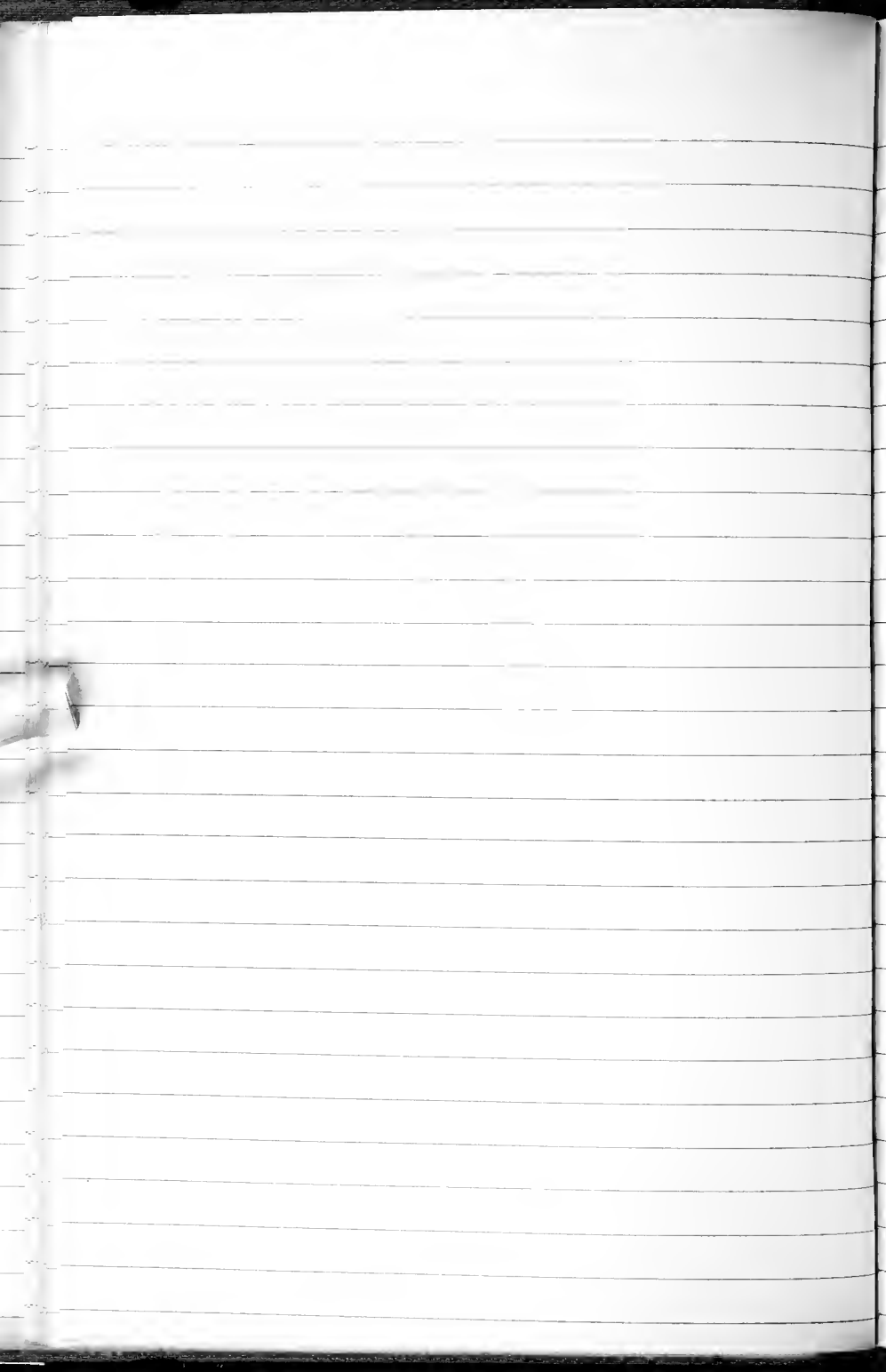
*Cephalanthus* Anti Malaria  
*rubra*

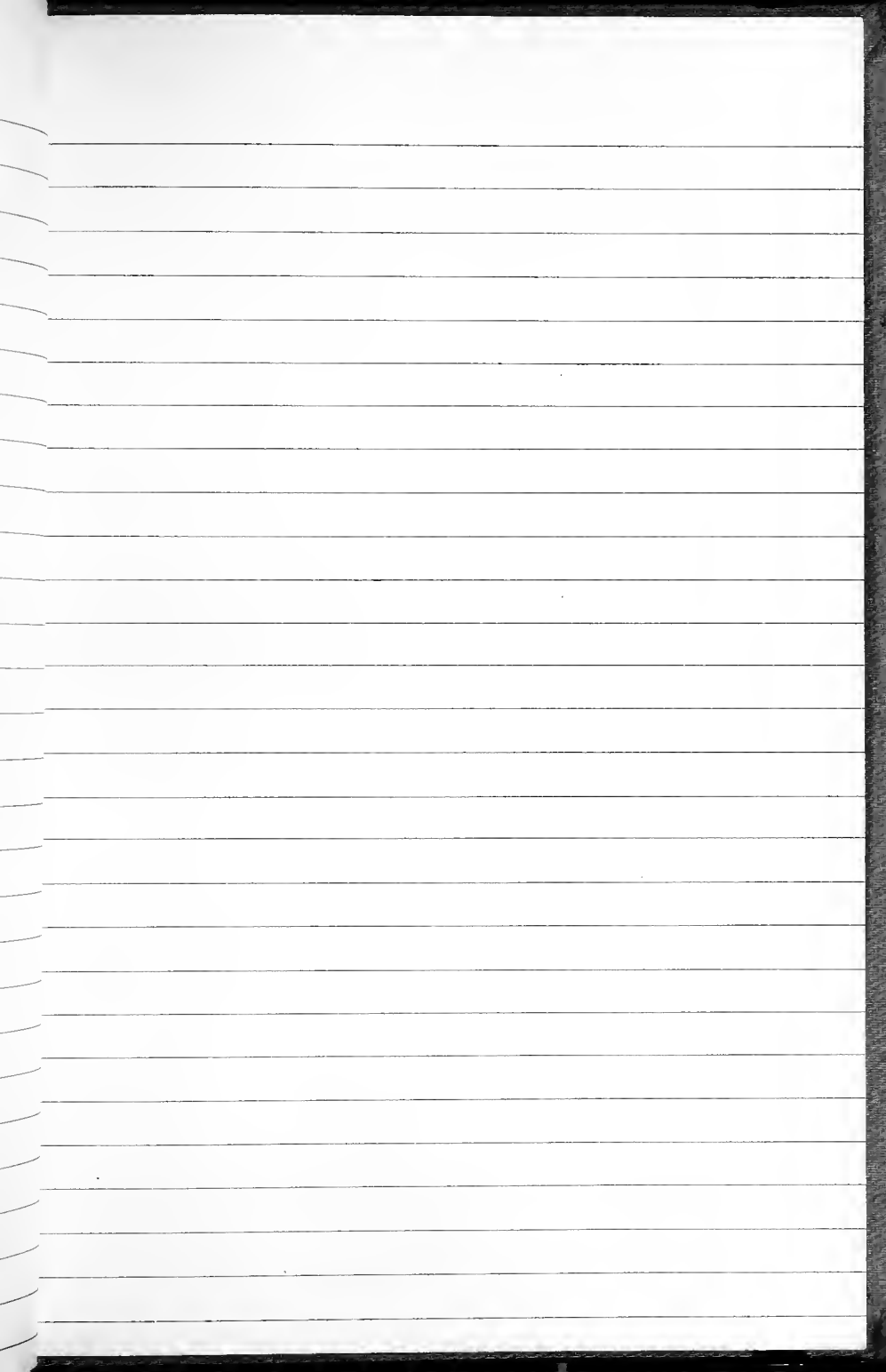
*Bhus parviflorus*

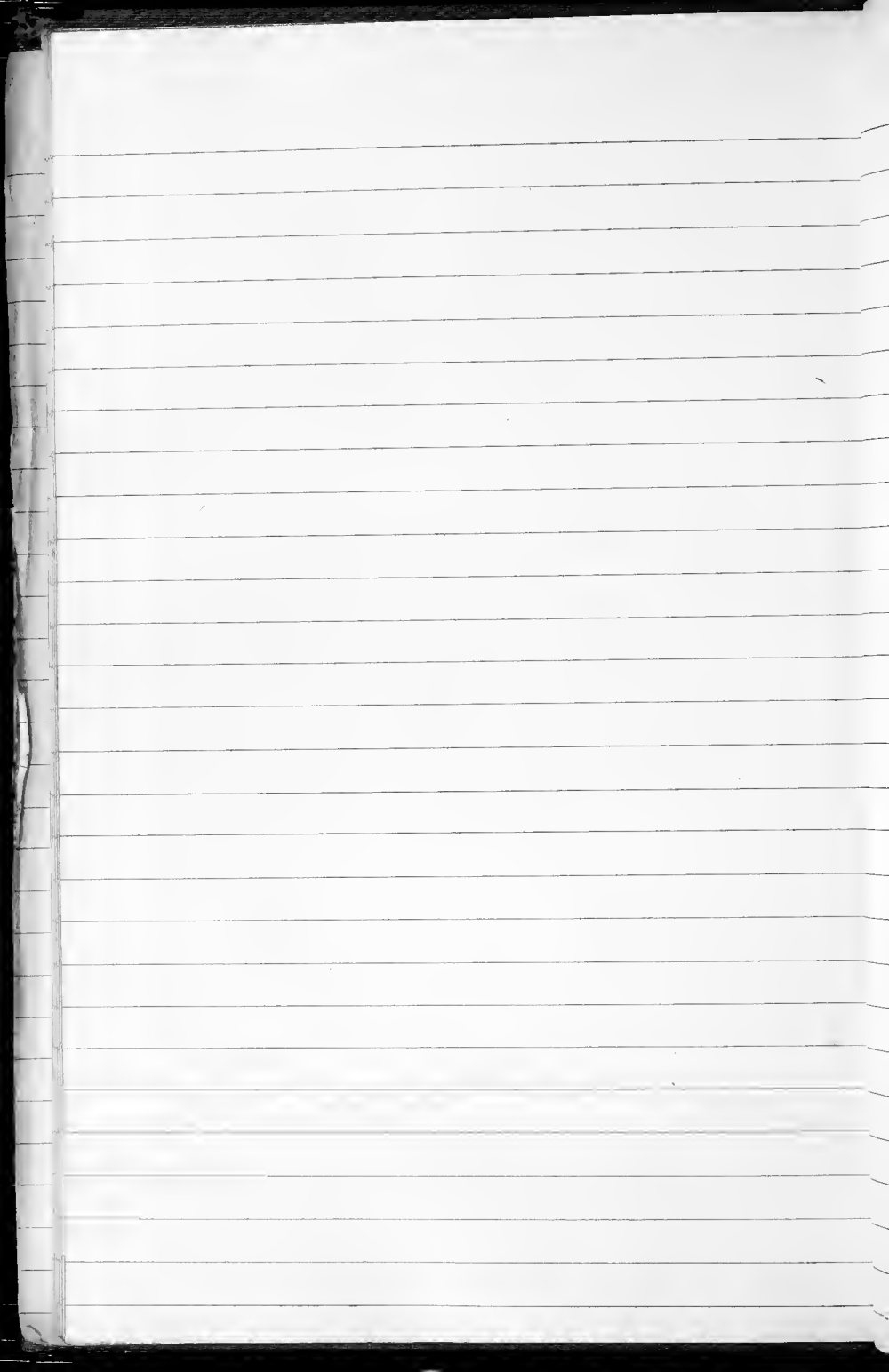
*Phellodendron*  
*Hookerianum parviflorum*

*Corn alba*

1/2











Laboratory of  
Vernicia Sellheim  
Sellheim

Bot. Garden of Batavia  
Sci Laboratory  
Special need is Flours

Interim Interim Fl.

send reports for a check

100

